



World Leaders in Taximeters

NOVAX TAXIMETER DISPATCH OPTIONS

Novax
Operators' Guide

2-0

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Text Messaging.

The Novax 2020 meter has a graphics display, which means it can display text messages, in the same way as a Mobile Data Terminal. Simply by sending a text message, the meter can display the message and await the driver's response, thus we have the basis for a simple taxi dispatch system for the cost of a taximeter, and a blank slate for you to build in your own features.

Several options and levels of complexity are possible.

- Provided we can "talk" to existing wireless network equipment, your current radio telephones could be used.
- The meter has built in support for the SMS text-messaging network, and can be connected directly to a cellular modem in the vehicle, and display incoming messages.
- The meter has a GPS port which supports most standard GPS receivers. The vehicle location can then be included in messages sent.

The basis for a simple, or complex dispatch system is thus built in to the Novax 2020 taximeter, and all in the price.

SMS Network.

- Level 1: A prepaid card in the vehicle, with zero credit will still allow receipt of calls and text messages. The dispatcher can thus send dispatch messages, and the driver can use voice response. Typical on-going cost 1 cent per text message from the office, No cost for the cab.
- Level 2: Based on a suitable account for both office and each cab (or prepaid with "Best Mate" add-on for the cab) The dispatcher sends dispatch messages, the driver response is the reply text message. In addition, every transition between *hired* and *vacant* results in a text message to the office. Vehicles can be polled by the office to update the status, and to acquire any pending transaction records (such as payment card records). On-going cost: unlimited texts for \$6 for "Best Mate". Less than 1 cent per message for office.
- Level 3: GPS data can be included in the vehicle transmission. A third party's mapping software can be adapted to provide vehicle tracking, resulting in a fully fledged dispatching facility. This level of operation may involve switching to the GPRS network instead of the SMS network, this would work via the Internet and allow the cab company to work

directly with third party specialists in vehicle tracking. One such company is "Here I Am" (check out their web site; www.heriam.co.nz).

Operation

Upon receipt of a text message, the meter will switch to its "MDT" mode and display the message received. In the MDT mode operation of the meter's buttons will generate a response to the network. Operation of the "*" button will send a "Mode-Change" response, and return the meter to its normal mode.

Should a text message be received while the meter is engaged, it will display the message for a short period (approximately 5 seconds) during which time the fare continues to accrue. The driver can either ignore the message, or respond in the same way he would if the meter was not engaged. On return to For Hire, hitting the "*" button will send a mode-change command to the network which can be used as a request to repeat the message.

Provision has been made to support the SMS network for all network commands and responses. (within the 256 character limitations of the service). This enables the meter to connect directly to a cellular modem. In operation the meter will extract the embedded command from incoming SMS message. Respond to the command by embedding the prescribed response in a SMS text format which will be directed to a pre-programmed cellular station.

Note. For security reasons the response will not necessarily be sent to the caller. The office modem number is pre programmed into the meter.

The Network can also be used to collect meter data, particularly useful when non-cash transaction such as credit cards and charge cards are processed. Each meter event (meter-on and meter-off) involves one message. The "meter-off" event can contain the transaction details, allowing the office to process transactions in near-real-time.

Transactions are also stored within the meter, these can be requested either individually over the network, or the complete log can be transferred periodically using a "dial-up" connection.

The networking of the fleet will also assist the office to comply with the new legislation regarding driver's working hours and rest periods. When a driver takes a break he is required to turn his meter off. By monitoring all meter status changes, the office computer can track working hours and rest periods. Warnings can be generated when the limits are exceeded.

Summary

The Novax 2020 is a taximeter which allows the system to grow around it.

All levels of dispatch can be catered for, the cost-effective level for your company is your choice. There are no on-going charges from our company, you deal directly with your network service provider. The sms network is available on all cellular networks, and by its very nature is always likely to be the lowest cost network available, and is very suitable for small packets of information, and a cost-effective option for smaller networks. Larger companies may require a faster network such as GPRS or 3G. As the need arises Novax will provide support for further networks.